

**Understanding livestock behavior will facilitate handling, reduce stress, and improve both handler safety and animal welfare.**



## VISION AND MOTION

- ◆ Livestock have limited depth perception. Their ability to perceive depth at ground level while moving is poor. Consequently, livestock often stop and lower their heads to look at strange objects on the ground.
  - S Be aware that cattle will often balk and refuse to walk over a drain gate, hose, puddle, shadow or change in flooring surface or texture.
  - S Eliminate visual distractions at animal facilities to assist in the movement of animals.
- ◆ Livestock are easily distracted. Moving objects and people seen through the sides or ahead in a chute or alleyway can cause balking or frighten livestock.
  - S Avoid moving or flapping objects such as fan blades or cloth, which can disrupt handling and cause balking.
  - S Loading ramps and handling chutes should have solid side walls to prevent animals from seeing distractions outside the chute.

S Limiting peripheral vision will help to reduce escape attempts and lower animal stress levels.

◆ Livestock have limited color perception.

- S All species of livestock are more likely to balk at a sudden change in color or texture.
- S Handling facilities should be painted one uniform color.

◆ Cattle have a tendency to move from a dark area to an illuminated area.

- S Minimize shadows and bright spots.
- S A spot light directed onto a ramp or other apparatus will often facilitate entry. The light must not shine directly into the eyes of approaching animals.



## NOISE

Cattle are more sensitive than people to high frequency noises. The auditory sensitivity of cattle is greatest at 8000 Hz. The human ear is most sensitive at 1000 to 3000 Hz. In livestock handling facilities, unexpected loud or strange noises should be avoided because they can be highly stressful to livestock.

- S Rubber stops on gates and squeeze chutes will help reduce noise.

S Animals can readily adapt to reasonable levels of continuous sound, such as a humming noise or instrumental music.

S Low level noise, such as clapping, can be used to move calm livestock. Animals will move away from low level noise, but will not respond to this technique if they become excited or agitated.



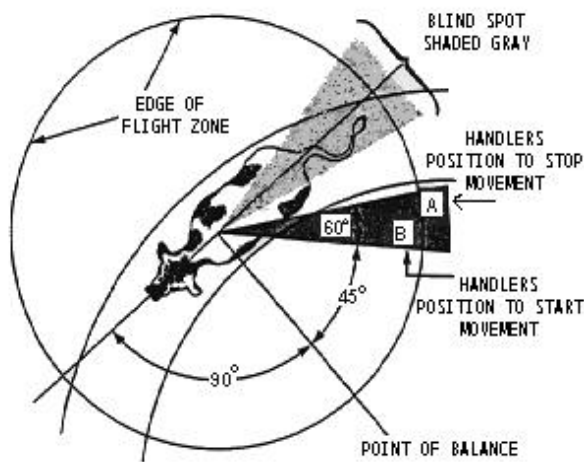
## HERD INSTINCT

Livestock have strong herd instincts and are likely to become highly agitated and stressed when they are separated from their herd mates. Isolated animals that become excited are likely to injure handlers or themselves. Many serious cattle handling accidents have been caused by isolated frantic cattle. Cattle are motivated to maintain visual contact with each other. Animals will readily follow the leader.

- S If an isolated animal becomes agitated, put other animals with it.
- S Allow livestock to follow the leader and do not rush them.
- S Keep animals calmer by placing them in groups and allowing them to have body contact.

# FLIGHT ZONE

Handlers who understand the concept of “flight zone” and “point of balance” will be able to move animals more easily, thereby reducing stress and helping to prevent injury to animals and handlers. The flight zone is the animal’s “personal space”. When a person enters the flight zone, the animal will move away. The size of the flight zone is determined by how tame or wild the livestock are and will decrease as animals receive frequent, gentle handling.



(Adapted from Flight and Point of Balance by Temple Grandin)

To effectively move animals in an orderly manner, the handler should work on the edge of the flight zone. Extremely tame livestock are often difficult to drive because they no longer have a flight zone. These animals may be lead with a feed bucket or halter. The circle on the diagram above represents the edge of the flight zone.

## ♦ Finding the edge of the flight zone:

- S If all the animals are facing you, you are outside the flight zone.
- S Slowly walk towards the animal.
- S When the first animal turns to move away from you, you have entered the animal's flight zone.
- S If the flight zone is penetrated too deeply, the animal will either bolt and run away or turn and run back past you.

## ♦ Moving animals using the flight zone concept:

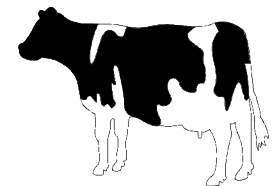
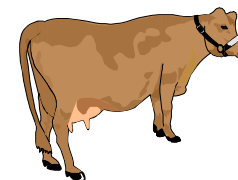
- S To make an animal move forward: stand in the dark shaded area marked in the flight zone diagram.
- S To cause the animal to back up: stand in front of the point of balance marked in the diagram. A flag on the end of a stick can be used to sort cattle by moving it back and forth across the point of balance.
- S If the cattle turn back and attempt to run past you, you have penetrated their flight zone too deeply. You should back up and retreat from inside the flight zone. Invading the flight zone is a very common mistake made by handlers when cattle are being driven down an alley or into an enclosed area, such as a pen.



For More Information Please Contact:  
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# LIVESTOCK HANDLING



**TIPS TO MINIMIZE  
ANIMAL STRESS  
&  
MAXIMIZE WORKER  
SAFETY**